

1/15

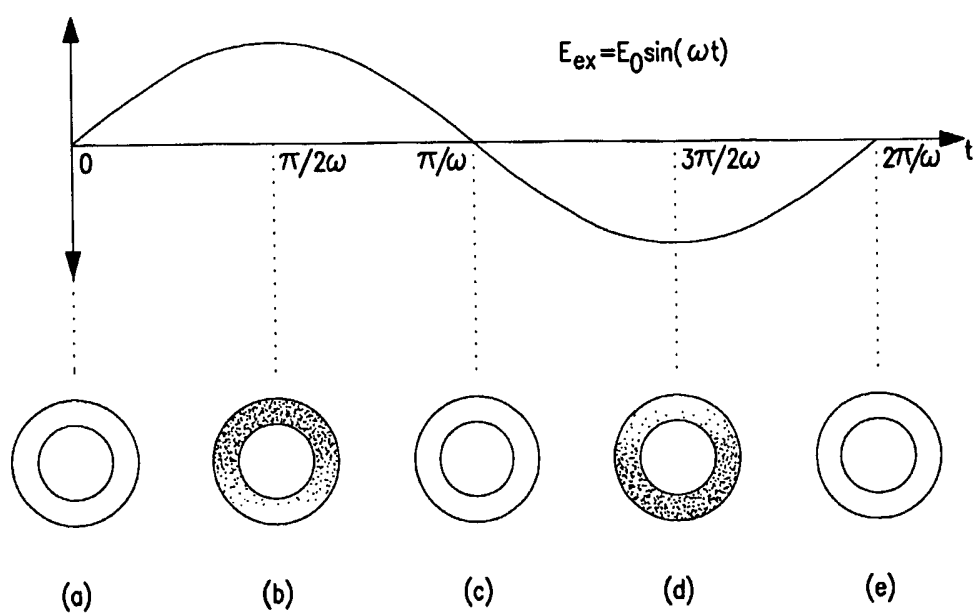


FIG. 1

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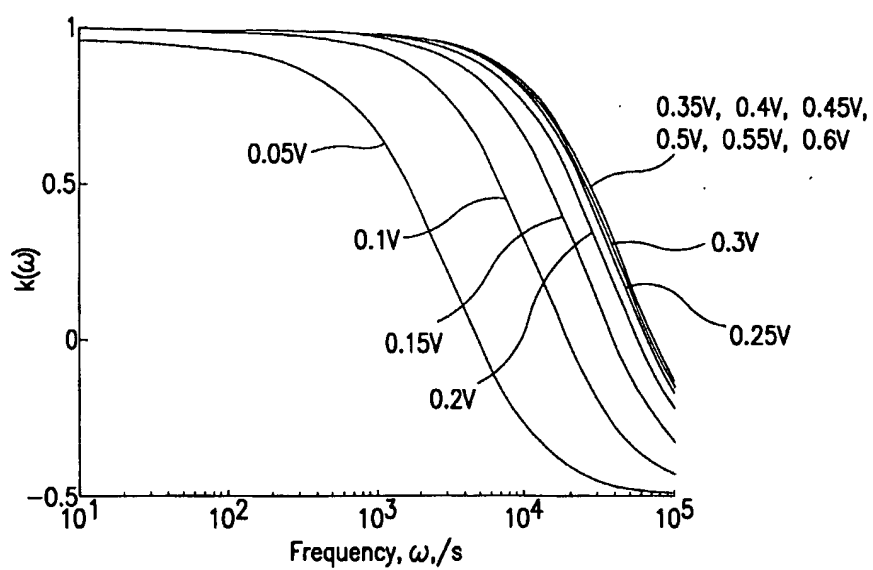


FIG. 2

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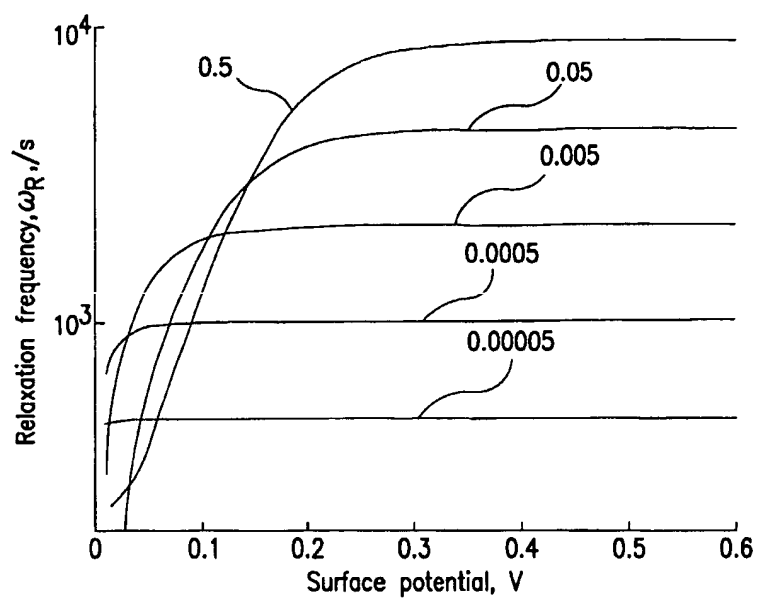


FIG. 3A

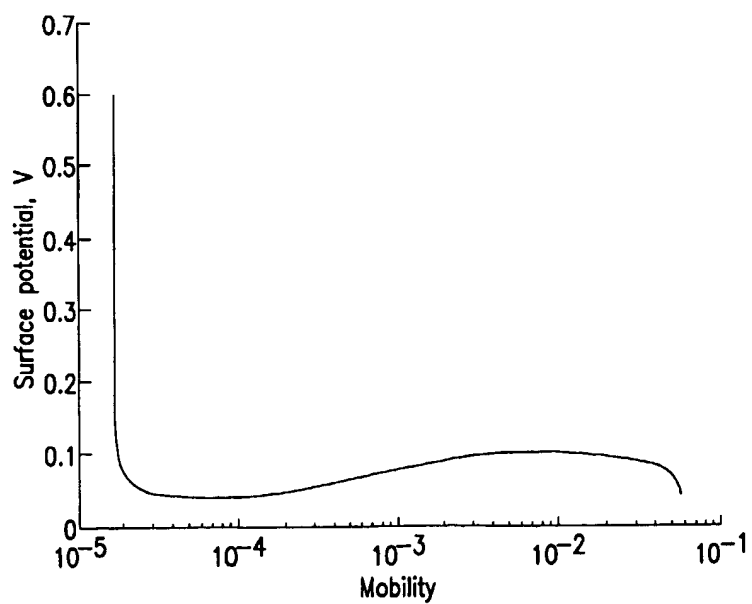


FIG. 3B

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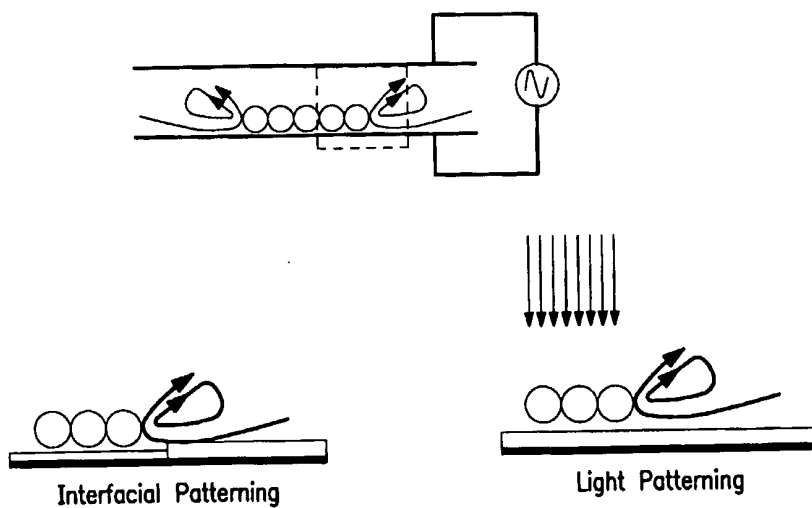


FIG. 4

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Flow Chart for Bead Characterization

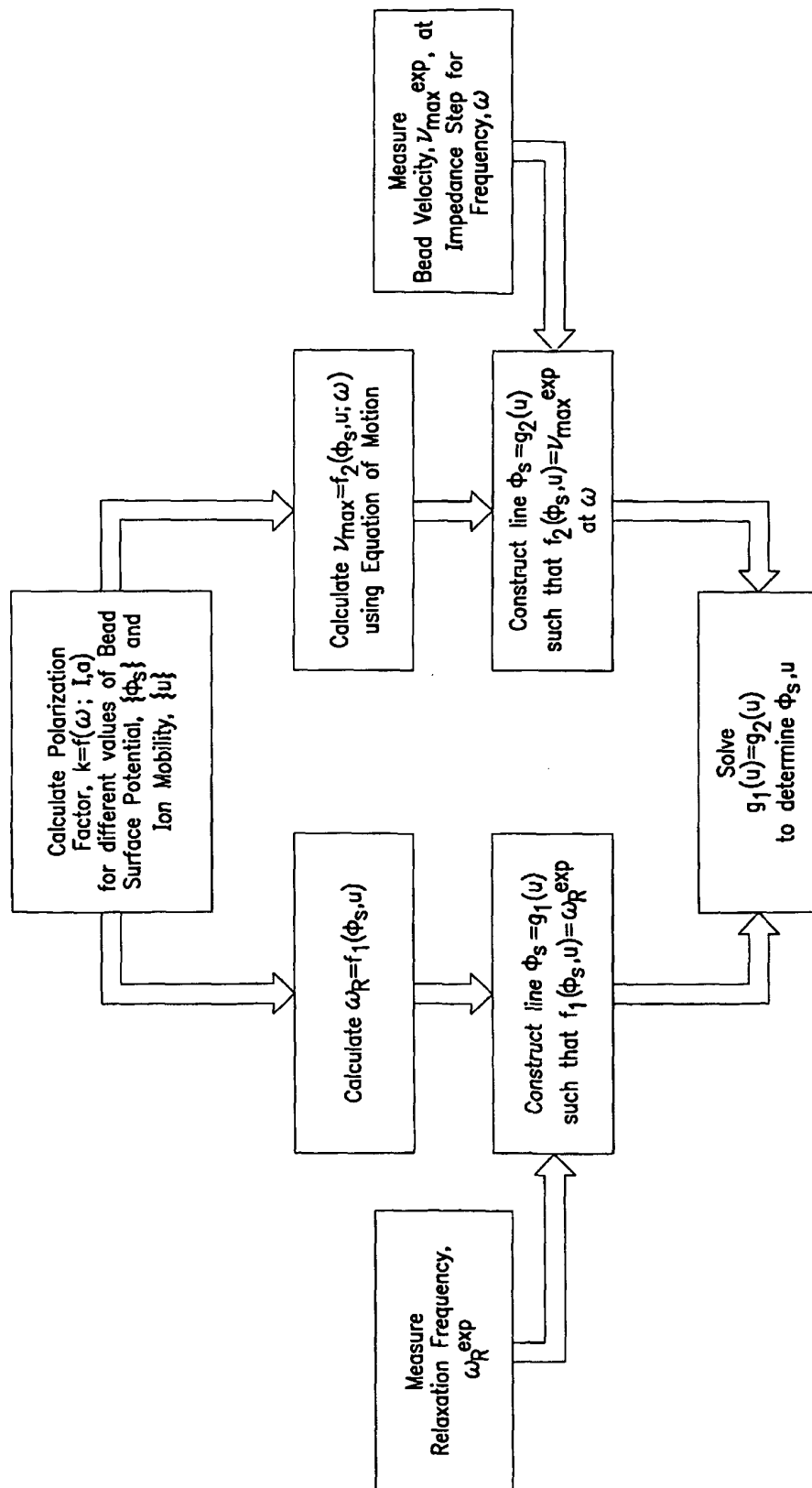


FIG. 5

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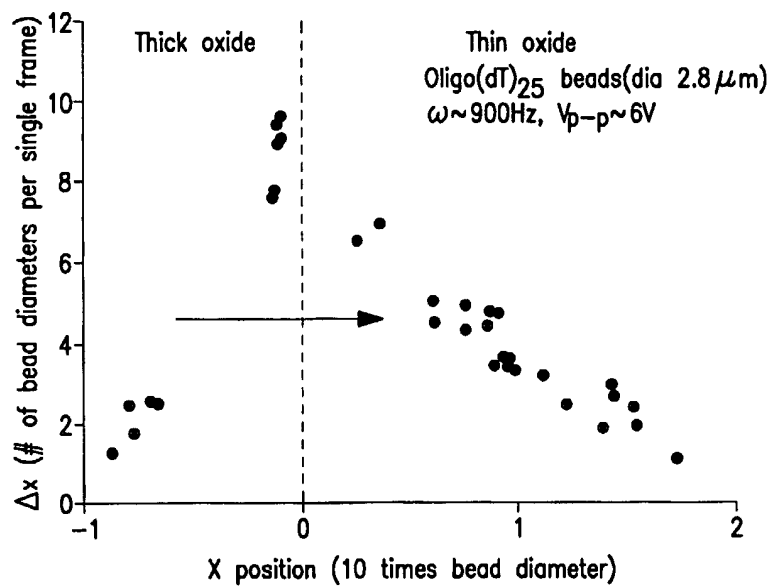


FIG. 6

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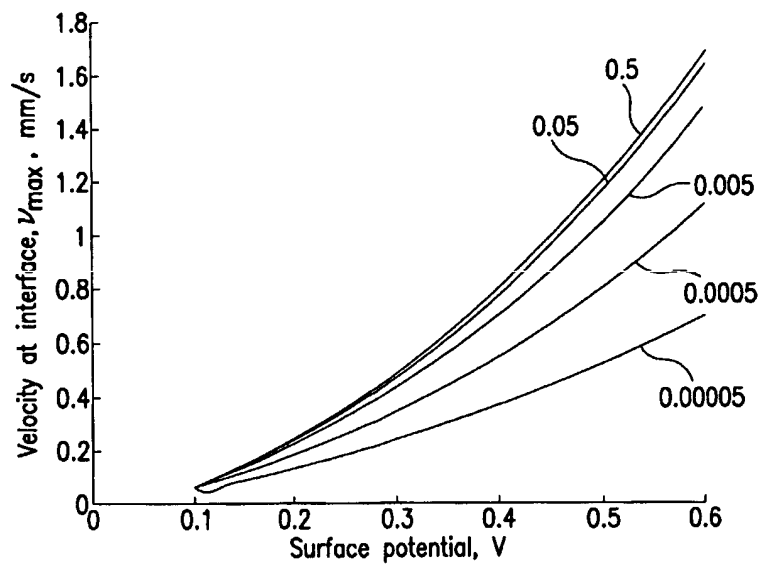


FIG. 7A

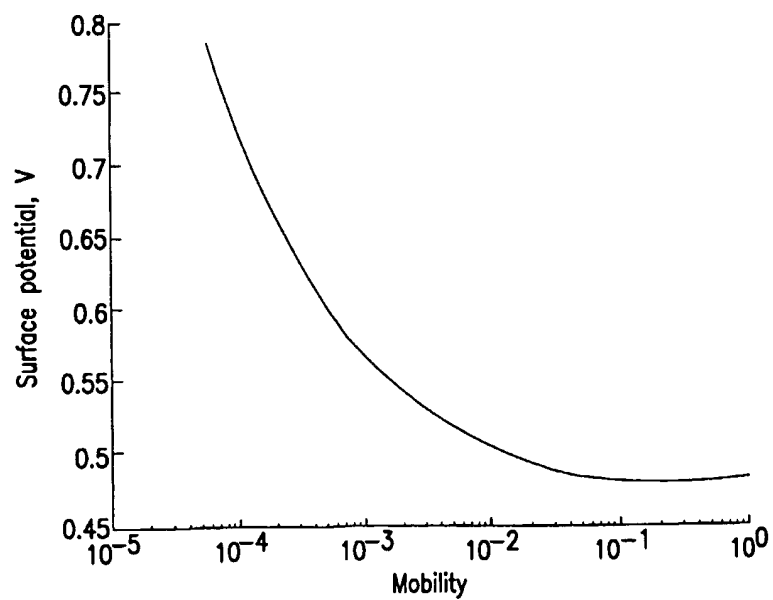


FIG. 7B

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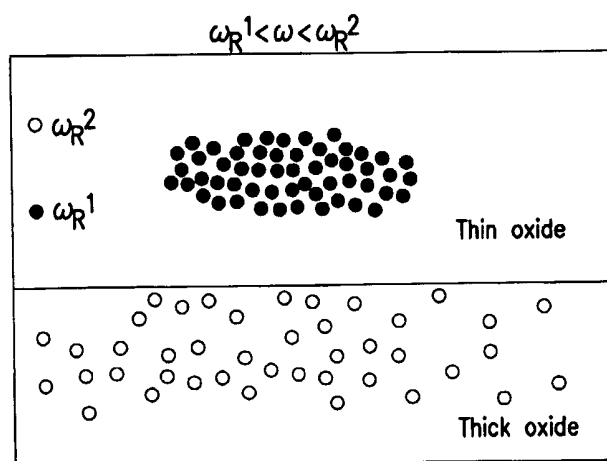
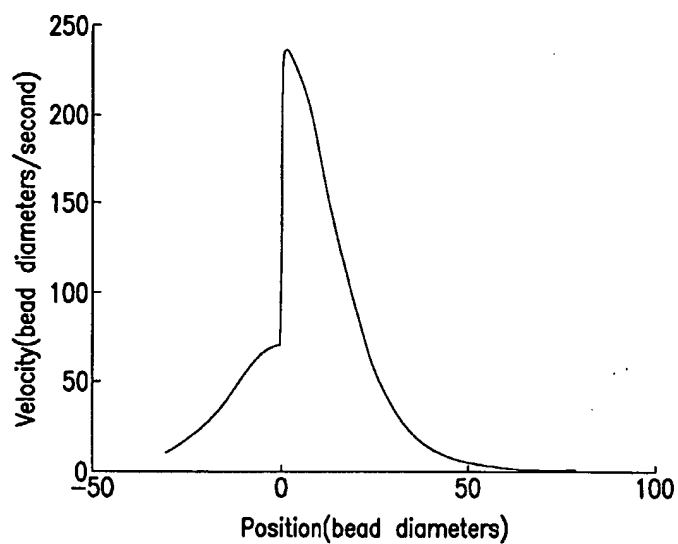


FIG. 8



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Simulated bead velocity as a function of position for a bead of diameter  $3.2\ \mu\text{m}$ , surface potential 200 mV and ionic strength 0.1 mM, voltage 5 V (peak-to-peak), gap width  $150\ \mu\text{m}$ .

**FIG. 9**

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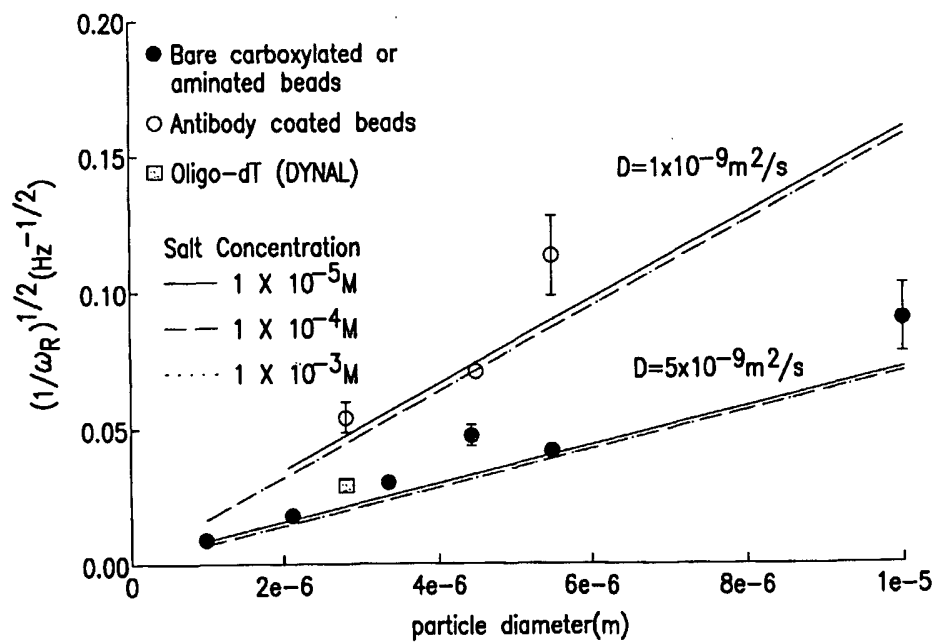


FIG. 10

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FIG. 11

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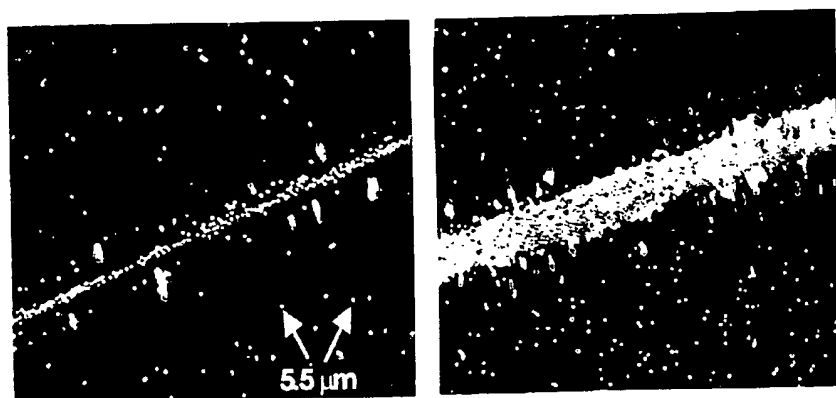


FIG. 12

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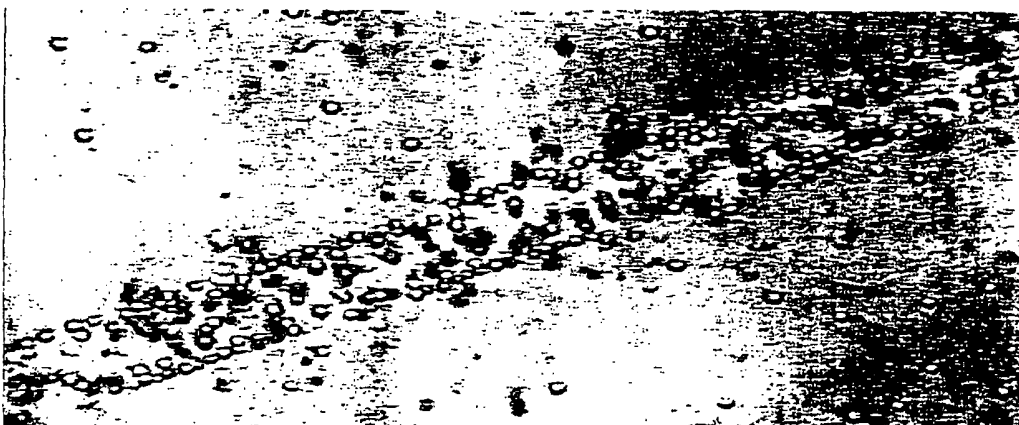
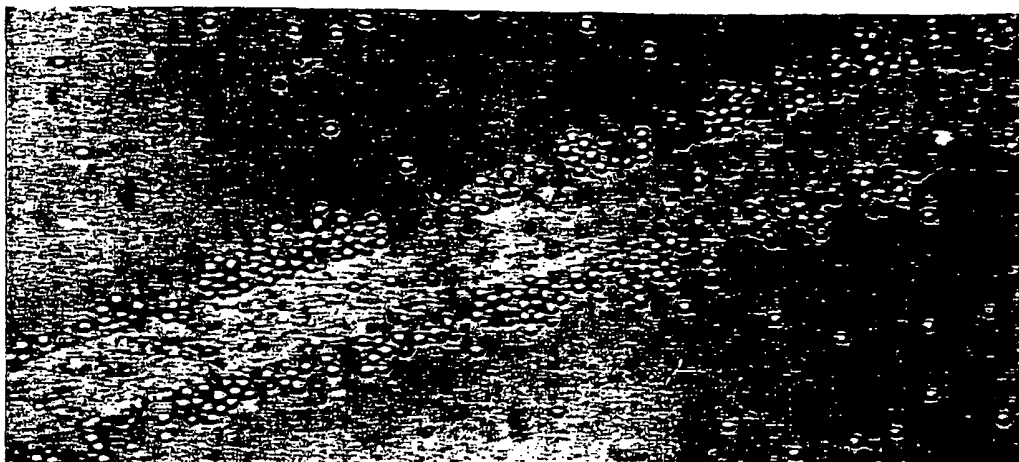


FIG. 13

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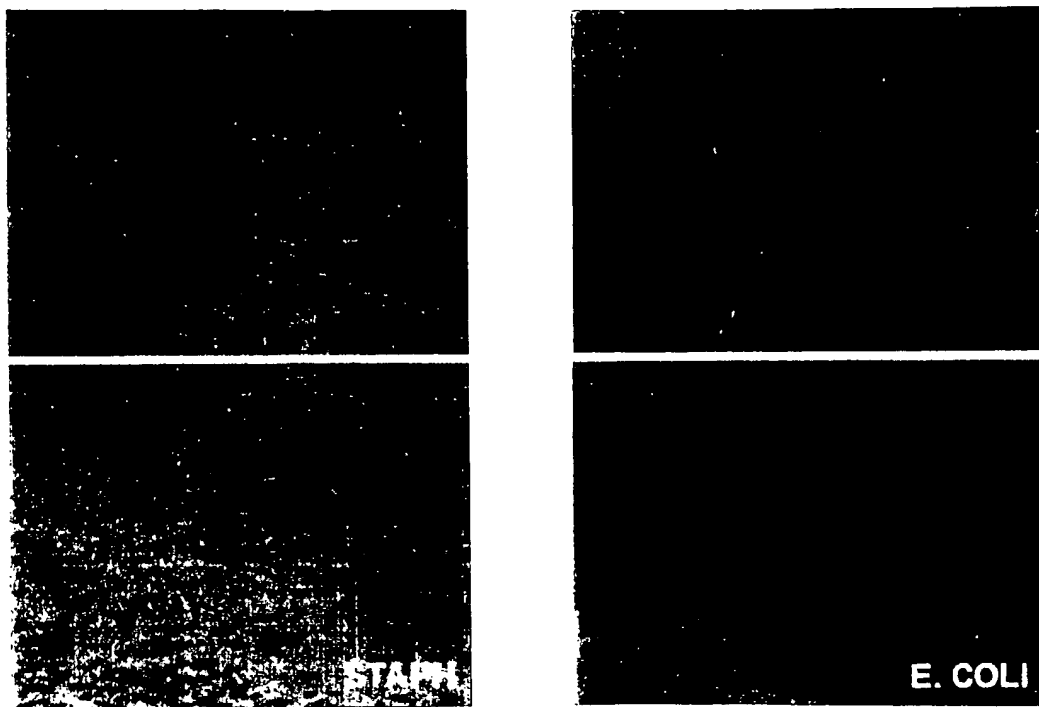


FIG. 14

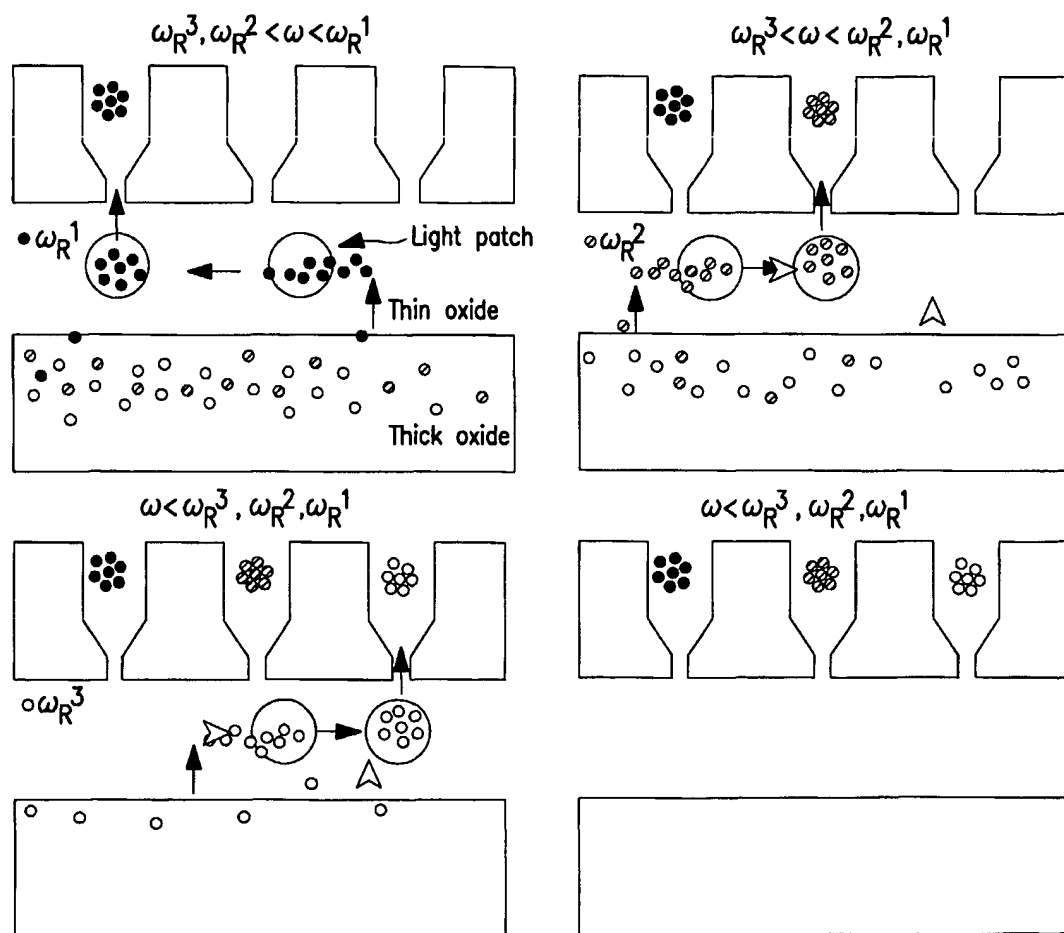


FIG. 15